t23_afproj (TMZVLYPrDzAMiZD-cxvZs8TeM9B1NriMHgkW)

October 27, 2020

Let $v7\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_diraf : \iota \Rightarrow o$ be given. Let $l1\_analoaf : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u2\_incsp\_1 : \iota \Rightarrow \iota$ be given. Let $k13\_afproj : \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $v1\_aff\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_afproj : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $v1\_aff\_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_afproj : \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k1\_afproj : \iota \Rightarrow \iota$ be given. Let $g1\_incsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1\_incsp\_1 : \iota \Rightarrow o$ be given. Let $u3\_incsp\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_incsp\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_incsp\_1 : \iota \Rightarrow o$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_afproj : \iota \Rightarrow \iota$ be given. Let $k10\_afproj : \iota \Rightarrow \iota$ be given. Let $k11\_afproj : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{2}$$

Assume the following.

$$\begin{gathered}\forall X0.((\neg v7\_struct\_0\ X0) \wedge ((v1\_diraf\ X0) \wedge (l1\_analoaf\ X0))) \Rightarrow \\ (\forall X1.(X1 \in k2\_zfmisc\_1\ (k8\_afproj\ X0)\ (k1\_tarski\ np\_\_2)) \Leftrightarrow \\ (\exists X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \wedge \\ ((X1 = k4\_tarski\ (k6\_afproj\ X0\ X2)\ np\_\_2) \wedge (v1\_aff\_4\ X2\ X0))))\end{gathered} \tag{3}$$

Assume the following.

$$\begin{gathered}\forall X0.((\neg v7\_struct\_0\ X0) \wedge ((v1\_diraf\ X0) \wedge (l1\_analoaf\ X0))) \Rightarrow \\ (\forall X1.(X1 \in k2\_zfmisc\_1\ (k1\_afproj\ X0)\ (k1\_tarski\ np\_\_1)) \Leftrightarrow \\ (\exists X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \wedge \\ ((X1 = k4\_tarski\ X2\ np\_\_1) \wedge (v1\_aff\_1\ X2\ X0))))\end{gathered} \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0)\wedge((\neg v1\_xboole\_0\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))))\Rightarrow(\forall X3.\ \forall X4.\forall X5.(g1\_incsp\_1\ X0\ X1\ X2 = g1\_incsp\_1\ X3\ X4\ X5)\Rightarrow((X0 = X3)\wedge((X1 = X4)\wedge(X2 = X5))))\tag{5}$$

Assume the following.

$$\forall X0.(l1\_incsp\_1\ X0)\Rightarrow(m1\_subset\_1\ (u3\_incsp\_1\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_incsp\_1\ X0)\ (u2\_incsp\_1\ X0))))\tag{6}$$

Assume the following.

$$\forall X0.(l1\_incsp\_1\ X0)\Rightarrow(\neg v1\_xboole\_0\ (u2\_incsp\_1\ X0))\tag{7}$$

Assume the following.

$$\forall X0.(l1\_incsp\_1\ X0)\Rightarrow(\neg v1\_xboole\_0\ (u1\_incsp\_1\ X0))\tag{8}$$

Assume the following.

$$\forall X0.((\neg v7\_struct\_0\ X0)\wedge((v1\_diraf\ X0)\wedge(l1\_analoaf\ X0)))\Rightarrow((v1\_incsp\_1\ (k13\_afproj\ X0))\wedge(l1\_incsp\_1\ (k13\_afproj\ X0)))\tag{9}$$

Assume the following.

$$\forall X0.\forall X1.k4\_tarski\ X0\ X1 = k2\_tarski\ (k2\_tarski\ X0\ X1)\ (k1\_tarski\ X0)\tag{10}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_xboole\_0\ X0\ X1)\Leftrightarrow(\forall X3.\ (X3 \in X2)\Leftrightarrow((X3 \in X0)\vee(X3 \in X1)))\tag{11}$$

Assume the following.

$$\forall X0.((\neg v7\_struct\_0\ X0)\wedge((v1\_diraf\ X0)\wedge(l1\_analoaf\ X0)))\Rightarrow(k13\_afproj\ X0 = g1\_incsp\_1\ (k9\_afproj\ X0)\ (k10\_afproj\ X0)\ (k11\_afproj\ X0))\tag{12}$$

Assume the following.

$$\forall X0.((\neg v7\_struct\_0\ X0)\wedge((v1\_diraf\ X0)\wedge(l1\_analoaf\ X0)))\Rightarrow(k10\_afproj\ X0 = k2\_xboole\_0\ (k2\_zfmisc\_1\ (k1\_afproj\ X0)\ (k1\_tarski\ np\_\_1))\ (k2\_zfmisc\_1\ (k8\_afproj\ X0)\ (k1\_tarski\ np\_\_2)))\tag{13}$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_tarski\ X1\ X0\tag{14}$$

Assume the following.

$$\forall X0.(l1\_incsp\_1\ X0)\Rightarrow((v1\_incsp\_1\ X0)\Rightarrow(X0 = g1\_incsp\_1\ (u1\_incsp\_1\ X0)\ (u2\_incsp\_1\ X0)\ (u3\_incsp\_1\ X0)))\tag{15}$$

Theorem 1

$$\forall X0.((\neg v7\_struct\_0\ X0)\wedge((v1\_diraf\ X0)\wedge(l1\_analoaf\ X0)))\Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u2\_incsp\_1\ (k13\_afproj\ X0)))\Leftrightarrow(\neg \forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow((\neg(X1 = k4\_tarski\ X2\ np\_\_1)\wedge(v1\_aff\_1\ X2\ X0))\wedge(\neg(X1 = k4\_tarski (k6\_afproj\ X0\ X2)\ np\_\_2)\wedge(v1\_aff\_4\ X2\ X0)))))$$